```
<110> Audoneet et al.
<120> POLYNUCLEOTIDE VACCINE FORMULA, PARTICULARLY FOR
     TREATING BOVINE RESPIRATORY DISEASE
<130> 454313-2250
<140> 09/232,279
<141> 1996-07-19
<160> 19
<170> PatentIn Ver. 2.1
<210> 1
<211> 2799
<212> DNA
<213> Bovine herpesvirus 2
atggccgctc gcggcggtgc tgaacgcgcc gcgggcgccg gagacggtcg gcgaggacag 60
cgtcgtcatc tacgaccggg acgtgttctc gctgctctac gcggtcctgc agcgcctggc 120
gccggcgggg cgcgccgc gctagccgct gccctgctat gggcgacgtg ggccctgctg 180
ctggcggcgc ccgccgcggg gcgaccggcg acaacgcccc cggcgccccc gcccgaagag 240
geegegagee eggegeeeee egegageeee ageeeeeeeg geeeegaegg egaegaegee 300
gccagccccg acaacagcac ggacgtgcgc gccgcgctcc ggctcgcgca ggcggccggg 360
gaaaactcgc gcttcttcgt gtgcccgccg ccctcgggcg ccacggtggt ccggctcgcg 420
cccgcgcggc cgtgccccga gtacgggctc gggcggaact acacggaggg catcggcgtc 480
atttacaagg agaacatcgc gccgtacacg ttcaaggcct acatttacaa aaacgtgatc 540
gtgaccacga cctgggcggg cagcacgtac gcggccatta caaaccagta cacggaccgc 600
gtgcccgtgg gcatgggcga gatcacggac ctggtggaca agaagtggcg ctgcctttcg 660
aaagccgagt acctgcgcag cgggcgcaag gtggtggcct ttgaccgcga cgacgacccc 720
tgggaggcgc cgctgaagcc cgcgcggctg agcgcgcccg gggtgcgggg ctggcacacg 780
acggacgatg tgtacacggc gctgggctcg gcggggctct accgcacggg cacctctgtg 840
aactgcatcg tggaagaagt ggaggcgcgc tcggtgtacc cgtacgactc gttcgcgctc 900
tcgaccgggg acattatcta catgtcgccc ttttacgggc tgcgcgaggg cgcgcaccgc 960
gagcacacca ggctactcgc cggagcgctt ccagcagatc gagggctact acaagcgcga 1020
catggccacg ggccggcgcc tcaaggagcc ggtctcgcgg aactttttgc gtacacagca 1080
cgtgacggta gcctgggact gggtgcccaa gcgcaaaaac gtgtgctcgc tggccaagtg 1140
gcgcgaggcg gacgaaatgc tgcgagacga gagccgcggg aacttccgct tcacggcccg 1200
ctcgctctcg gcgacctttg tgagcgacag ccacaccttc gcgttgcaga atgtgccgct 1260
gagcgactgc gtgatcgaag aggccgaggc cgcggtcgag cgcgtctacc gcgagcgcca 1320
caacggcacg cacgtgctgt cgggcagcct ggagacgtac ctggcgcgcg gcggctttgt 1380
cgtggccttc cggcgatgct cagcaacgag ctggccaagc tgtacctgca ggagctggcg 1440
cgctcgaacg gcacgctcga ggggctgttc gccgccgcgg cgcccaagcc gggcccgcgg 1500
cgcgcgcgcc gcgccgccc gtccgcgccc ggcagcccgg gcgcggccaa cgggcccgcc 1560
ggcgacggcg acgccggcgg gcgggtgact accgtgagct cggccgagtt tgcggcgctg 1620
cagttcacct acgaccacat ccaggaccac gtgaacacca tgttcagccg cctggccacg 1680
tcctggtgcc tgctgcagaa caaggagcgc gccctgtggg ccgaggcggc taagctcaac 1740
gccatggccg tgacgtactg ccacgagctg ggcgaggggc gcgtgttcat cgagaactcg 1860
atgcgcgcgc ccggcggcgt ttgctacagc cgcccgccgg tctcctttgc cttcggcaac 1920
```

gagagcgagc cggtggaggg ccagctcggc gaggacaacg agctgctgcc gggccgcgag 1980 ctcgtggagc cctgcaccgc caaccacaag cgctacttcc gctttggcgc ggactacgtg 2040 tactacgaga actacgcgta cgtgcggcgg gtcccgctcg cggagctgga ggtgatcagc 2100

acctttgtgg acctaaacct cacggttctg gaggaccgcg agttcttgc gctagaagtg tacacggcg ccgagctcgc cgacacggt ctgctcgact acagcgagat acagcgcgcg agtctacgac attgaccgcg tggtcaagac ggacggcaat tgggcacgg tggtgctgg cgccaacttc tttcagggcc tgggcgcgct cgggcaggcg tggtgctgg cgccgcgggt gccacgggc tgggcgcgct cggcgaggcg tggggcacgg tcgttattg cgaacccgtt cggcggctg gccacgggc tgctgggtgc cggcggctg tcgtggcgct tcctgtaccga tcaccacgcg cgcgctcaag gacgacgcc ggggcgcaac cgccgggctg gaggaagagg aggagtttga cgcggccaaa ctggagcagg cgggcgcaac cgcccgggc tggccgctc tgtcagcgg tggcgcaaa ctggagcagg cccgcgggc tgcccgggc tgccccgggc tgccccgggc tgccccgggc cgccccgggc tgccccgggc tgcccgggc tgcccgggc tgcccgggc tgcccgggc tgcccgggc tgcccgggc tgcccgggc tgccgcggc tgccgcggg tgcccgcgg tgcccgcgg tgcccgcgg tgcccgggg tgcccgcgg tgcccgggg tgcccgcggg tgcccgcggg tgcccgggg tgcccgggg tgcccgggg tgcccgggg tgcccgggg tgcccgggg tgcccgggg tgcccgggg tgcccggggg tgcccggggg tgcccggggg tgcccggggg tgcccggggg tgcccggggg tgcccggggg tgcccggggg tgcccgggggggg	2280 2340 2400 2460 2520 2580 2640 2700
<210> 2 <211> 30 <212> DNA <213> Bovine herpesvirus 2	
<400> 2 ttgtcgacat ggccgctcgc ggcggtgctg	30
<210> 3 <211> 21 <212> DNA <213> Bovine herpesvirus 2	
<400> 3 gcagggcagc ggctagcgcg g	21
<210> 4 <211> 31 <212> DNA <213> Bovine herpesvirus 2	
<400> 4 aaactgcaga tgcaagggcc gacattggcc g	31
<210> 5 <211> 27 <212> DNA <213> Bovine herpesvirus 2	
<400> 5 atcttgtacc atatgaccgt ggcgttg	27
<210> 6 <211> 33 <212> DNA <213> Bovine herpesvirus 2	
<400> 6 aaaactgcag ggatggcggc aacagccatg agg	33

31

32

35

35

47

32

<210> 13

<400> 12

<210> 12 <211> 32 <212> DNA

<213> Bovine herpesvirus 2

acgcgtcgac atgaagaaac tagagaaagc cc

<210> 7 <211> 31 <212> DNA

<400> 7

<213> Bovine herpesvirus 2

<213> Bovine herpesvirus 2

<211> 33